

Newark Office
1080 S. Chapel Street
Newark, Delaware 19702
Tel: (302) 731-8633

Milton Office
606 Federal Street
Milton, Delaware 19968
Tel: (302) 684-5080

May 29, 2019

Rick Galloway, P.G.
State of Delaware
Department of Natural Resources
and Environmental Control
Site Investigation and Restoration Section
391 Lukens Drive
New Castle, DE 19702

RE: Diluted Chromic Acid Release
Procino Plating Site (DE-0344)
901 S. Market Street
Town of Blades, Delaware

TBE Project No. 18-1027.F

Dear Mr. Galloway:

Ten Bears Environmental Associates Co. (TBE) has prepared this letter providing information regarding activities performed to address a release of diluted chromic acid that occurred within the easternmost building at the Procino Plating facility located in the Town of Blades, Delaware. The release occurred while water was added to a chromic acid solution in a plating tank at the facility, to replace water lost through evaporation. The water was inadvertently left running and the tank was overfilled. A portion of the released solution was captured by containment vessels surrounding, and in the vicinity of, the chrome plating tank and was recovered. However, some of the solution flowed into the crawlspace beneath the building, which has an unimproved, soil floor. Therefore, in addition to recovering the captured solution from secondary containments, Procino Enterprises, Inc. personnel used hand tools to excavate soil in the crawlspace impacted by the release, and the excavated soil was transported to an appropriate off-site facility for disposal. Soil samples were collected and submitted for laboratory analysis to assess the effectiveness of the removal. Further information is provided below.

SITE INFORMATION

The Procino Plating Site is an active chrome plating facility located at 901 S. Market Street in the Town of Blades, Delaware. Figure 1 depicts the approximate Site location on U.S. Geological Survey (USGS) topographic mapping and Figure 2 provides a recent aerial photograph of the Property and vicinity.

Procino Plating, Inc. entered into a Voluntary Cleanup Program (VCP) Agreement with the Delaware Department of Natural Resources and Environmental Control, Site Investigation and Restoration Section (DNREC-SIRS) in 2012 to evaluate and address environmental concerns at the facility. Following a Remedial Investigation (RI) and Interim Action Soil Removal, Long-Term Stewardship (LTS) Monitoring is being performed at the Property, primarily to evaluate chromium concentrations in groundwater beneath and downgradient of the facility. The most recent LTS monitoring event was performed in February 2019, and will be documented under separate cover.

RELEASE INCIDENT AND INITIAL RESPONSE

The diluted chromic acid release was identified at the Procino Plating facility on Saturday, November 24, 2018. TBE's understanding, based on information provided by Mr. Michael Procino of Procino Enterprises, is that an employee began adding deionized water to a chromic acid solution in an approximately 500-gallon capacity plating tank during the afternoon of Friday, November 23, 2018, to replace water lost through evaporation. The deionized water was added using a hose from a pressurized source (i.e., the municipal drinking water system), and the employee inadvertently forgot to stop the water flow before leaving for the day, resulting in the overfill. The release was identified when the employee returned to the facility the morning of November 24, 2018.

A portion of the overfill was captured by a secondary containment structure surrounding the plating tank, and by floor level spill containment "trays" situated beneath platform grating (see attached photographs). However, the secondary containment vessels overfilled and an unknown volume of diluted chromic acid flowed into the crawlspace of the building, apparently through one or more holes in the building floor. The approximate location of the chromic acid release into the crawlspace is depicted on Figure 3.

Chromic acid solution captured by the containment structures was pumped into 250-gallon capacity plastic tote tanks and 55-gallon capacity metal storage drums. Procino Enterprises personnel also recovered some chromic acid solution that accumulated on the concrete floor of a basement adjacent to the crawlspace. Containerized product, totaling approximately 900 gallons, has since been transported to Chemtron Corporation in Avon, Ohio for treatment / disposal, as documented on the attached manifest. Mr. Procino informed TBE that the chromic acid solution used for plating at the facility consists of deionized water with chromium trioxide, sulfuric acid, a catalyst (Atotech Heef 25 MS), and mist suppressant (Atotech Fumetrol 21).

The DNREC Emergency Prevention and Response Section (DNREC-EPRS) was notified of the release on November 24, 2018, the day the release was identified. TBE's understanding is that, following a discussion with Mr. Procino, DNREC-EPRS concluded that Procino Enterprises was addressing the release and DNREC-EPRS personnel did not mobilize to the site.

CRAWLSPACE SOIL REMOVAL

The majority of the building where the chromic acid release occurred is constructed over a crawlspace with a soil floor, with the exception of the western portion, which has an approximately 2,000-square-foot basement with a concrete floor. Foundation walls for the building divide the crawlspace area into four “bays,” each approximately 14 feet wide. These are identified on Figure 3 as “Bay 1” through “Bay 4.” Mr. Procino informed TBE that the majority of the chromic acid that entered the crawlspace was released into Bay 2 and, due to the slope of the crawlspace floor, migrated in a westerly direction toward the crawlspace bay entrance. In addition, the solution reportedly accumulated at some lower areas between the release location and the entrance. Mr. Procino also indicated that an apparently smaller volume of the chromic acid solution was released to Bay 1.

Procino Enterprises personnel used hand tools to excavate soil in the crawlspace impacted by the chromic acid release, and containerized the soil in 1-cubic yard capacity boxes lined with plastic. Surface soils in an approximately 50-foot by 7-foot area of the northern portion of Bay 2, extending from the release location to the crawlspace bay entrance, were excavated to a depth of approximately 1.0 foot. Excavation extended to greater depths (up to 5.0 feet below the surface of the crawlspace floor) at some limited areas where chromic acid solution ponded / accumulated. The excavated crawlspace soils were transported to Chemtron Corporation for treatment / disposal. Information documented on the attached manifest indicates that a total of approximately 9 to 10 cubic yards (\pm 16 tons) of soil was excavated from the crawlspace and transported to the Chemtron facility.

December 14, 2018 Soil Sampling

TBE personnel initially collected discrete soil samples at selected locations and depths within the crawlspace (see Figure 4) using hand tools on December 14, 2018 and submitted the samples to Eurofins Lancaster Laboratories Environmental, LLC (ELLE) for total chromium analysis. The primary purpose was to obtain information to assist Procino Enterprises with evaluating the effectiveness of excavation completed up to that time, and to identify areas warranting further excavation. The laboratory analysis report published by ELLE is attached.

The laboratory analysis results for the soil samples collected on December 14, 2018, and the approximate extent of soil excavation completed up to that time time, are depicted on Figure 4. The depth intervals for the samples are in feet below the surface of the surrounding crawlspace floor. For example, the sample identified as “HA-1 (0 - 1)” is a surface soil sample collected at the HA-1 location. At the limited areas where excavation was performed to greater depths, the shallowest sample collected was from the surface of the excavation bottom. For example, the area surrounding the HA-8 sampling location was excavated to a depth of approximately 3.0 feet, and the sample identified as “HA-8 (3.0 – 3.5)” is a ‘surface’ sample collected from the bottom of that excavation.

As depicted on Figure 4, the most elevated chromium concentrations were detected in soil samples collected at sampling locations: HA-1, HA-6, HA-7, HA-8, and HA-9. Accordingly, Procino Enterprises subsequently excavated additional soils at these soil sampling locations.

February 13, 2019 Soil Sampling

After Procino Enterprises completed further soil excavation, TBE collected additional soil samples from the crawlspace on February 13, 2019 and submitted the samples to ELLE for total chromium analysis. Several of the soil samples were collected at previous sampling locations to evaluate the effectiveness of the additional soil removal, and are identified using the same location identification followed by an "X." For example, after the area surrounding the HA-8 location was further excavated to a depth of approximately 5.0 feet, the near surface sample collected from the bottom of this excavation on February 13, 2019 was identified as "HA-8X (5.5 – 6.0)." Additional samples were collected at other locations / depths to further evaluate the extent of chromium impairments in soil.

The laboratory analysis results for the soil samples collected on February 13, 2019, and the approximate extent of soil excavation completed to date, are depicted on Figure 5. Laboratory analysis results for soil samples collected on December 14, 2018 from depths greater than the final excavation depths also are provided on Figure 5 because they remain representative of existing soil conditions.

Laboratory analysis results for a total of 33 soil samples that are considered representative of existing / remaining crawlspace soil conditions are depicted on Figure 5. Total chromium was not detected at concentrations exceeding DNREC's applicable Screening Level (February 2018) of 214 milligrams per kilogram (mg/kg) in 23 of those samples. At the majority of the sampling locations where chromium was detected at concentrations exceeding the Screening Level (HA-1, HA-2, HA-3, HA-6, HA-7, HA-8, HA-11, and HA-12), the laboratory analysis results indicate that this is a surface / near surface condition, with chromium concentrations decreasing with increasing depth. Specifically, chromium was not detected at concentrations exceeding the DNREC Screening Level in the deepest soil samples collected at sampling locations HA-2, HA-3, HA-7, HA-11, and HA-12. Locations where chromium was detected at concentrations exceeding the DNREC Screening Level in the deepest soil sample were limited to HA-1 (4.5 – 5.0 feet, 452 mg/kg), HA-6 (3.5 - 4.0 feet, 815 mg/kg), and HA-8 (6.2 - 6.7 feet, 354 mg/kg). However, laboratory analysis results for soil samples collected at nearby locations indicate limited extent.

Further excavation of soil in the building crawlspace at the Procino Plating Property is not readily practicable, due to accessibility, and potentially could compromise the building foundation. However, total chromium was not detected at concentrations exceeding the applicable DNREC Screening Level of 214 mg/kg in 23 of 33 soil samples considered representative of existing crawlspace soil conditions, as discussed above. Further, total chromium was the only contaminant of concern identified by the findings of the prior RI, and the

maximum detected total chromium concentration detected in the 33 soil samples considered representative of existing crawlspace soil conditions (815 mg/kg) is less than an order of magnitude greater than the Screening Level.

Due to the limited accessibility, direct-contact to chromium-impaired soil in the building crawlspace is not reasonably likely. Additionally, Procino Enterprises is proposing to construct concrete floor slabs in the building crawlspace areas to mitigate impacts caused by possible future releases, which would further limit direct-contact exposure. Possible impacts to groundwater caused by the chromic acid release will continue to be evaluated as part of the Long-Term Stewardship Groundwater Monitoring Program. As further discussed in the RI report, groundwater conditions identified at, and downgradient of, the Procino Plating Site appear conducive to natural attenuation of dissolved-phase chromium, specifically through the reduction of hexavalent chromium to less soluble trivalent chromium.

Please contact us if you have any questions or require additional information.

Sincerely,

TEN BEARS ENVIRONMENTAL ASSOCIATES CO.

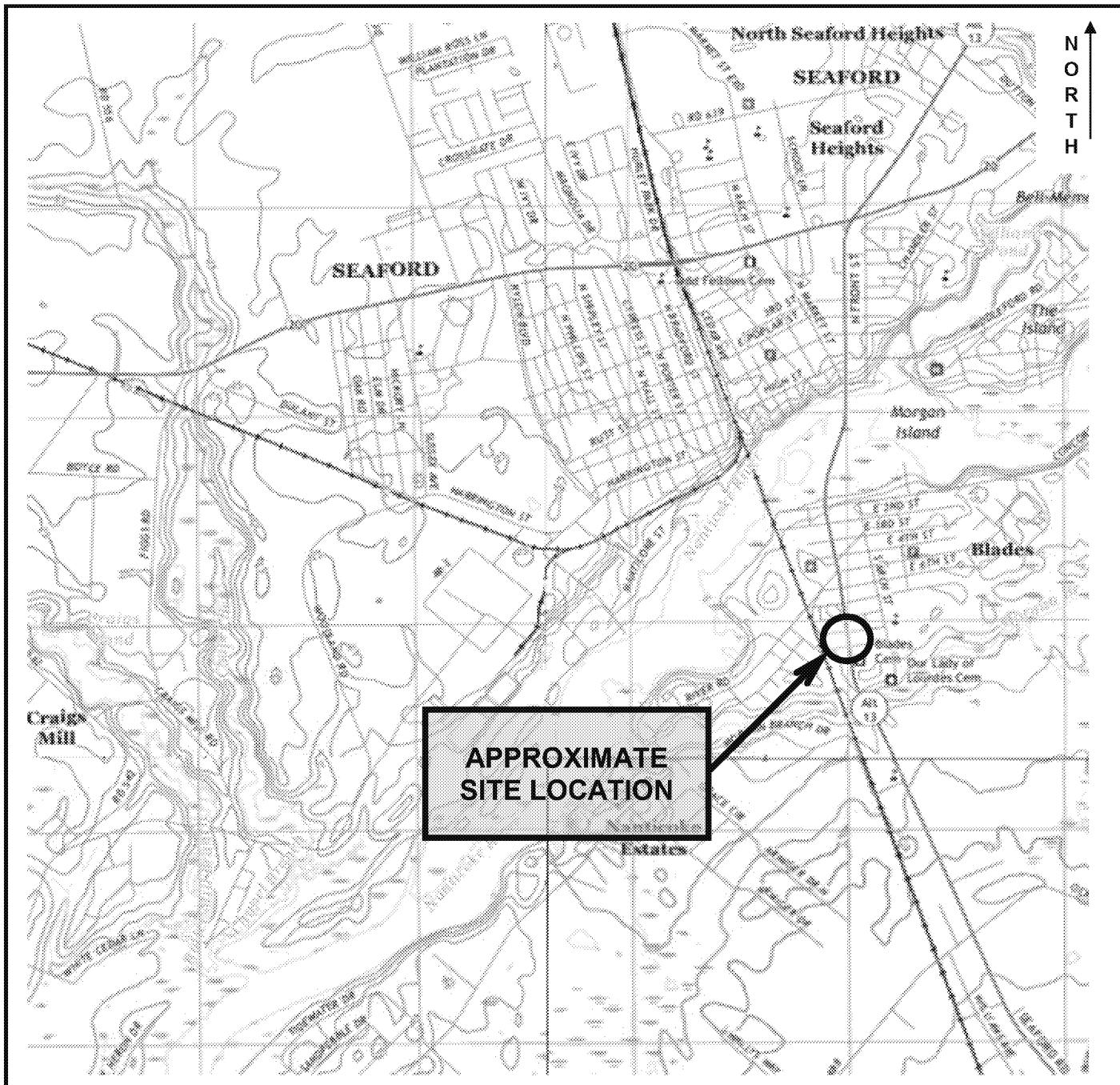
Ex. 4 CBI

Ex. 4 CBI P.E.
President, Milton Office

Attachments: Figures (5)
Photographs
Transportation Manifest
Laboratory Analysis Reports

cc: Mr. Michael Procino – Procino Plating

FIGURES



THIS LOCATION SKETCH WAS ADOPTED FROM THE USGS TOPOGRAPHIC MAP,
7.5 MINUTE SERIES, FOR SEAFORD EAST, DELAWARE (2016)



Ten Bears Environmental
606 Federal Street
Milton, DE 19968
Phone: (302) 684-5080 Fax: (302) 684-5081

FIGURE 1 - SITE LOCATION SKETCH PROCINO PLATING PROPERTY (DE-0344)

901 SOUTH MARKET STREET
TOWN OF BLADES, DELAWARE

DATE:	6/5/2018	JOB NUMBER:	18-1027.F
DRAWN BY:	KEF	SCALE:	1" = approx. 2,200'
CHECKED BY:	KJL	FIGURE NO:	1
FILE NO:	181027.F.FIG	SHEET	1 OF 1



Legend

---- - - - - Approximate property boundary

Note: This drawing was adapted from an aerial photograph obtained from Google Earth



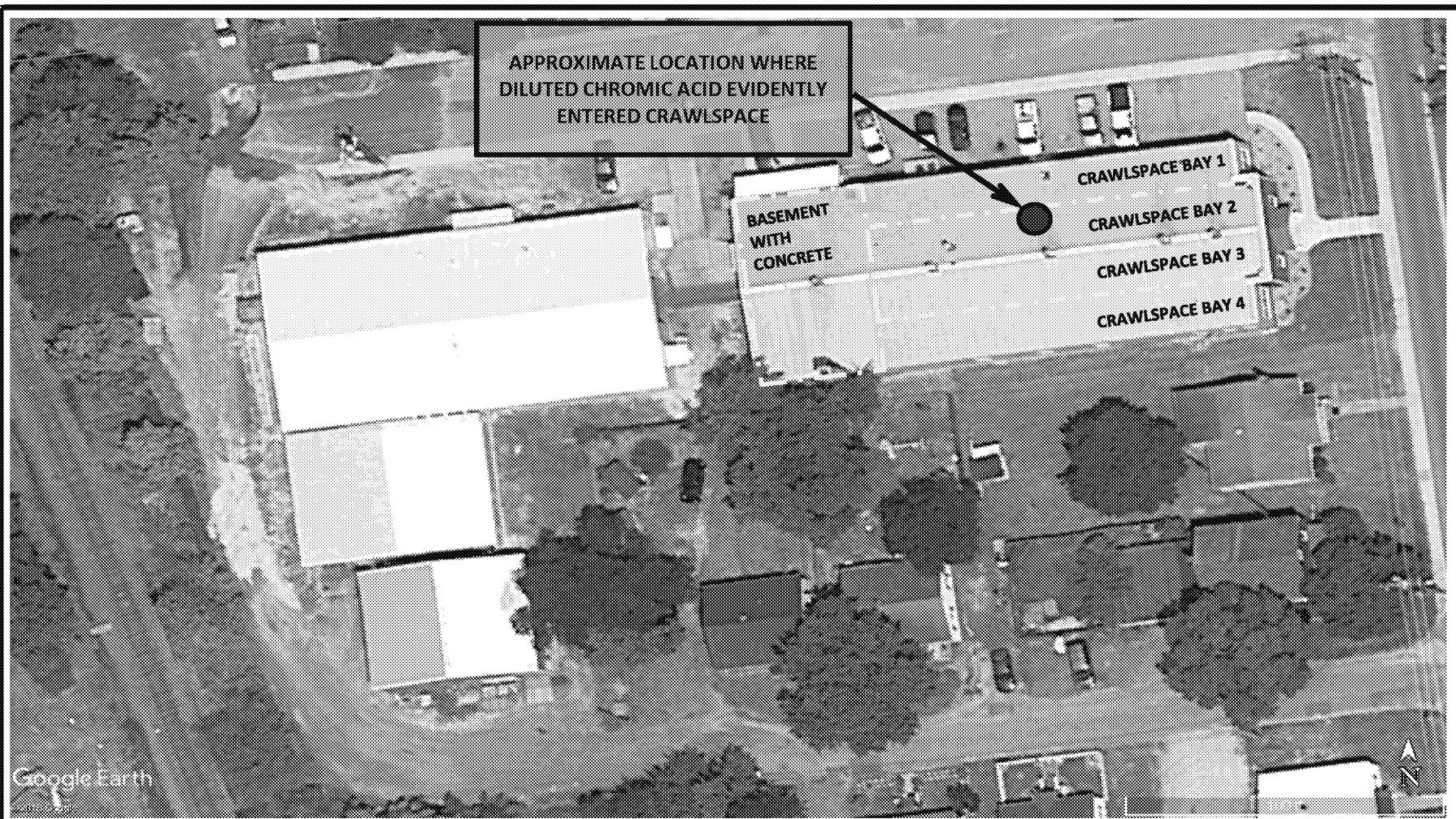
**Ten Bears
Environmental**

Ten Bears Environmental Associates Co.
606 Federal Street
Milton, DE 19968
Phone: (302) 684-5080 Fax: (302) 684-5081

**FIGURE 2 - AERIAL PHOTOGRAPH
PROCINO PLATING PROPERTY (DE-0344)**

901 SOUTH MARKET STREET
TOWN OF BLADES, DELAWARE

DATE:	4/18/2019	JOB NUMBER:	18-1027.F
DRAWN BY:	KEF	SCALE:	As shown
CHECKED BY:	KJL	FIGURE NO:	2
FILE NO:	181027F.FIG	SHEET	1 OF 1



Note: This drawing was adapted from an aerial photograph obtained from Google Earth.

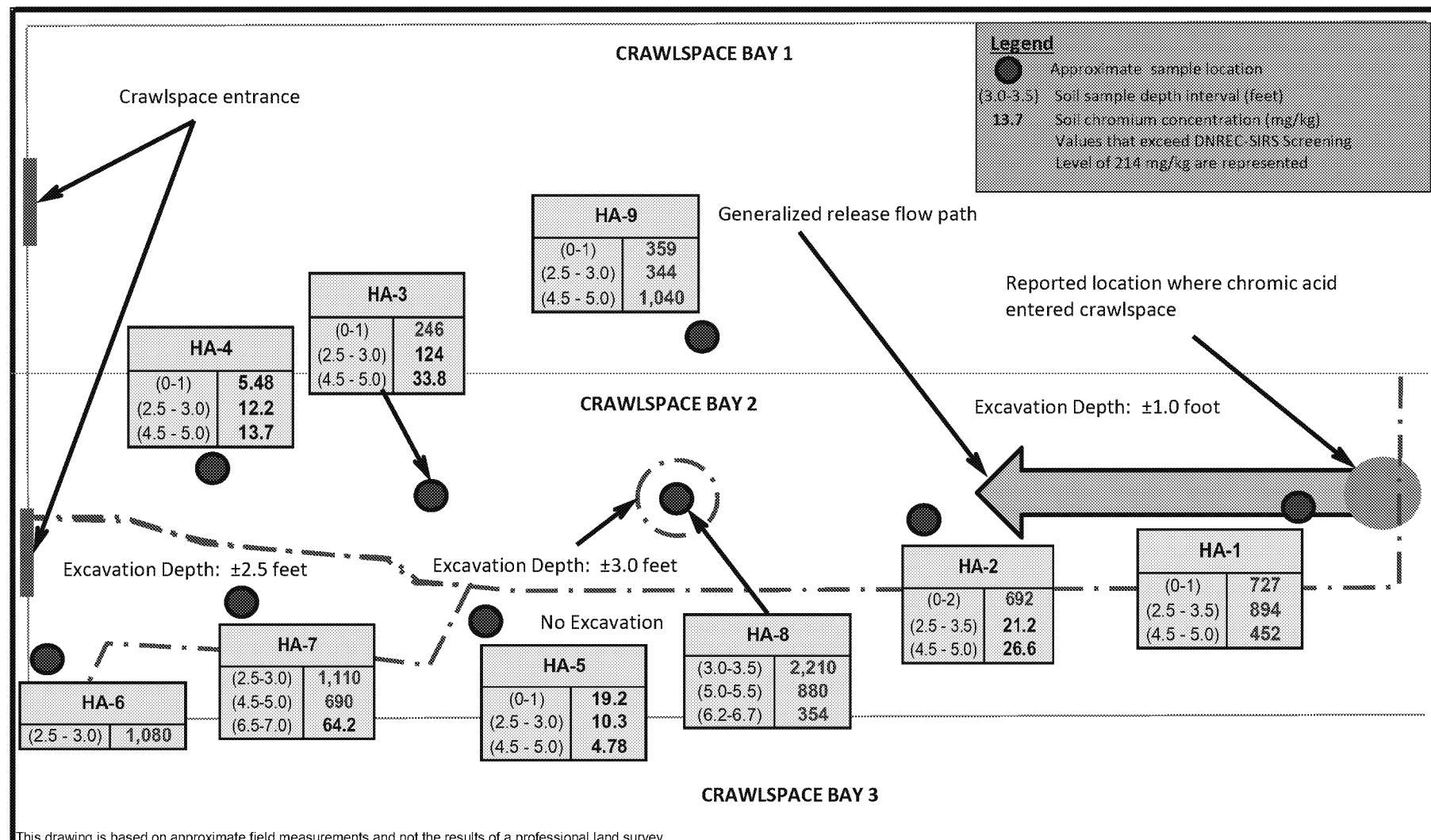


Ten Bears Environmental Associates Co.
606 Federal Street
Milton, Delaware 19968
Phone: (302) 684-5080 Fax: (302) 684-5081

FIGURE 3 - APPROXIMATE RELEASE LOCATION

PROCINO PLATING PROPERTY (DE-0344)
901 SOUTH MARKET STREET
TOWN OF BLADES, DELAWARE

DATE:	4/18/2019	JOB NUMBER:	18-1027.F
DRAWN BY:	KEF	SCALE:	As shown
CHECKED BY:	KJL	FIGURE NO.:	3
FILE NO.:	181027F.FIG	SHEET	1 OF 1



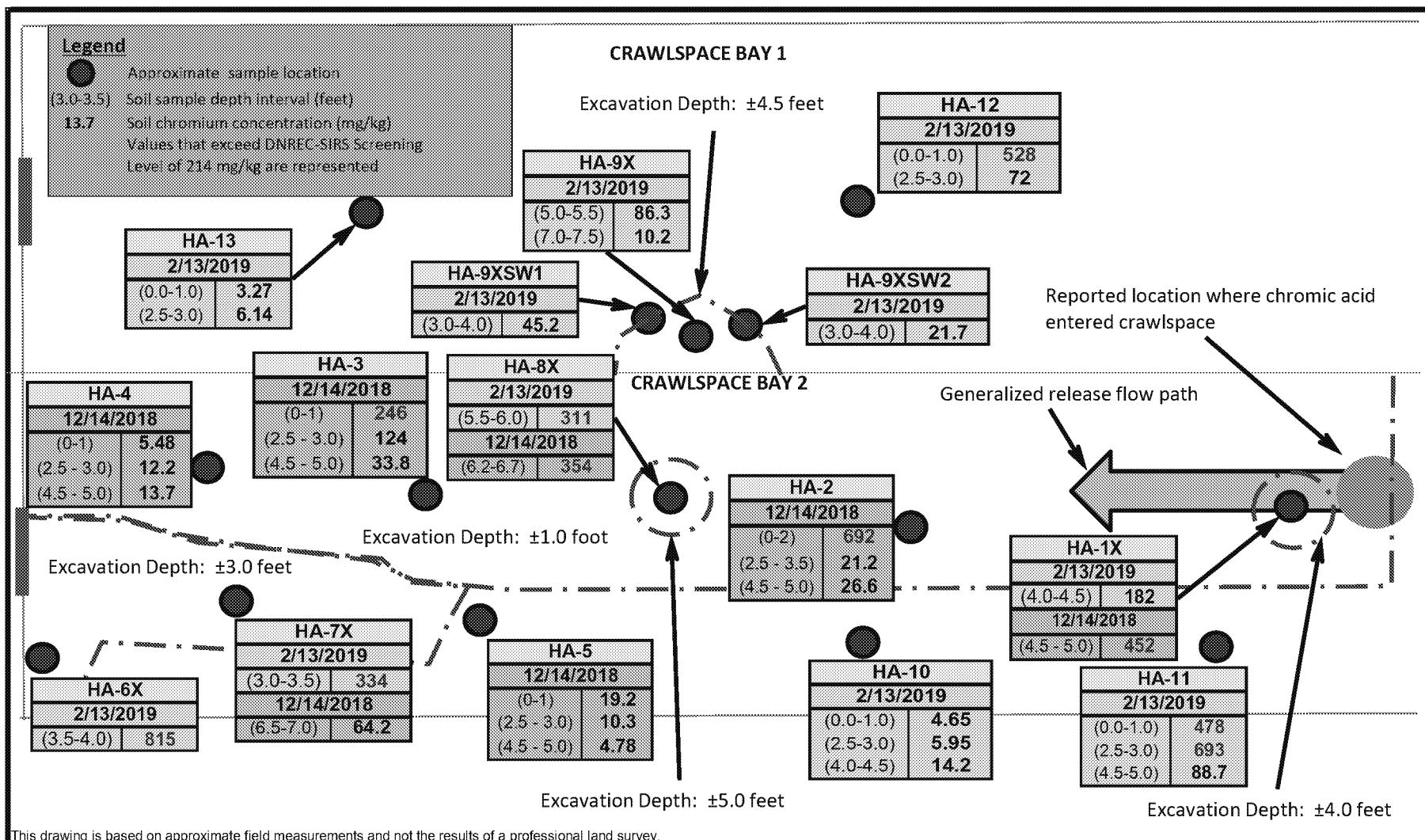
Ten Bears Environmental

Ten Bears Environmental Associates Co.
606 Federal Street
Milton, Delaware 19968
Phone: (302) 684-5080 Fax: (302) 684-5081

FIGURE 4 - DECEMBER 2018 SOIL SAMPLE LABORATORY ANALYSIS RESULTS

PROCINO PLATING PROPERTY (DE-0344)
901 SOUTH MARKET STREET
TOWN OF BLADES, DELAWARE

DATE:	4/18/2019	JOB NUMBER:	18-1027.F
DRAWN BY:	KEF	SCALE:	1" = approx. 5'
CHECKED BY:	KJL	FIGURE NO:	4
FILE NO:	181027F.FIG	SHEET	1 OF 1



This drawing is based on approximate field measurements and not the results of a professional land survey.

FIGURE 5 - FEBRUARY 2019 SOIL SAMPLE LABORATORY ANALYSIS RESULTS

PROCINO PLATING PROPERTY (DE-0344)

901 SOUTH MARKET STREET
TOWN OF BLADES, DELAWARE

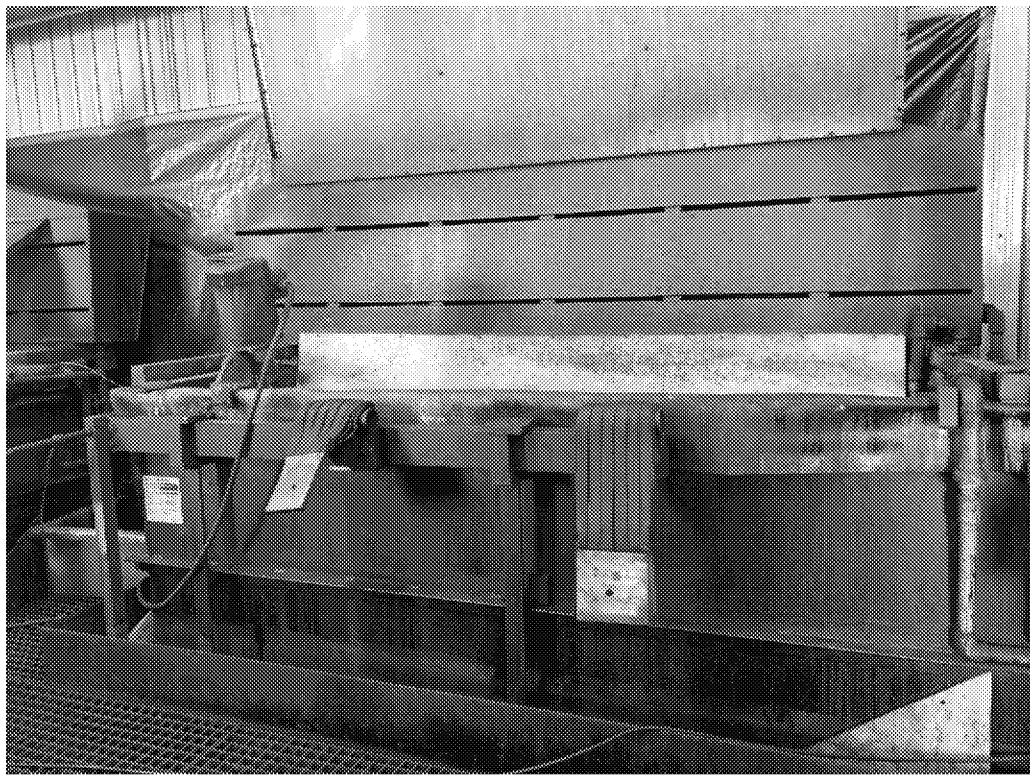


Ten Bears Environmental Associates Co.
606 Federal Street
Milton, Delaware 19968
Phone: (302) 684-5080 Fax: (302) 684-5081

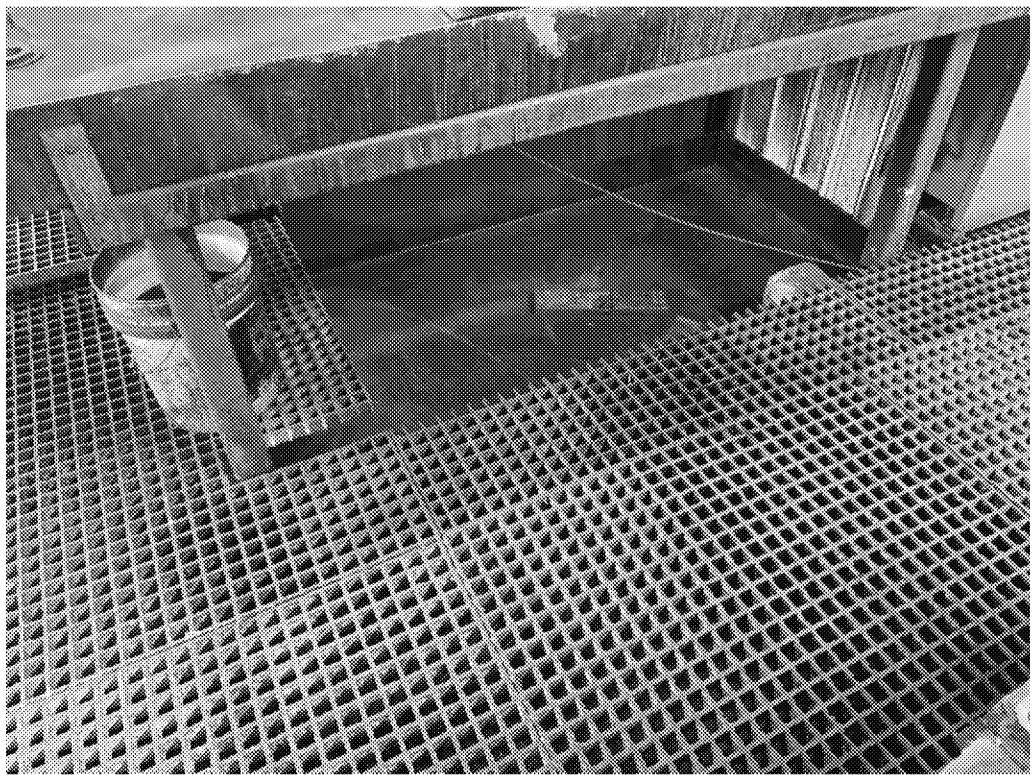
DATE:	4/18/2019	JOB NUMBER:	18-1027.F
DRAWN BY:	KEF	SCALE:	1" = approx. 5'
CHECKED BY:	KJL	FIGURE NO:	5
FILE NO:	181027F.FIG	SHEET	1 OF 1



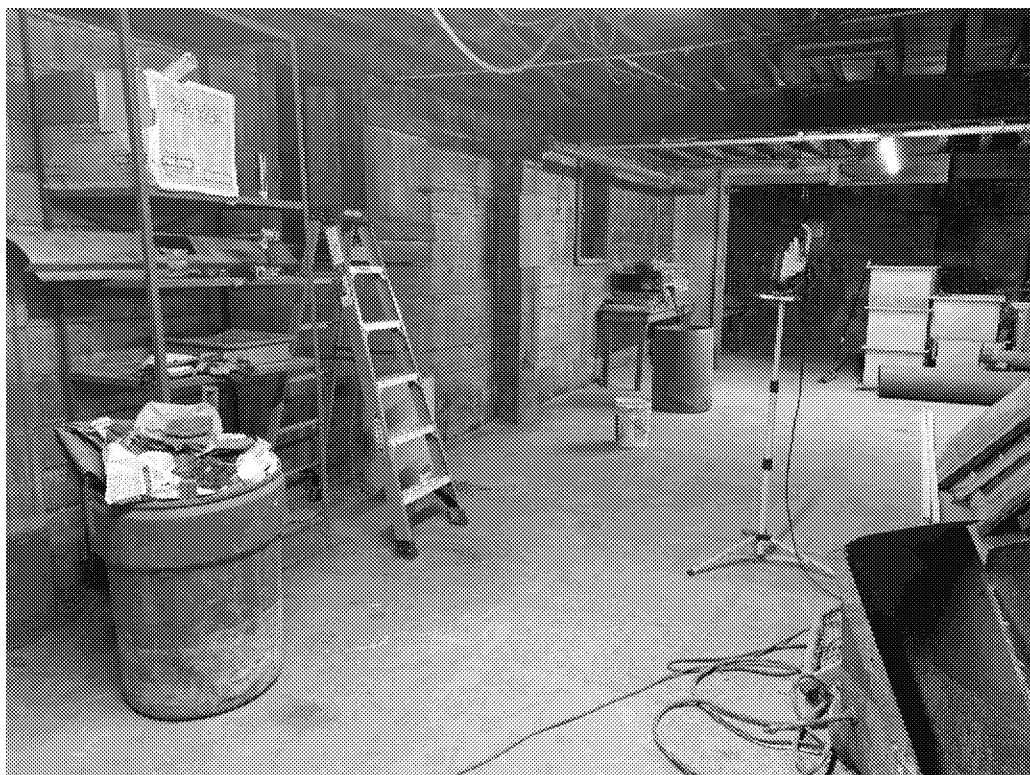
PHOTOGRAPHS



Photograph 1: Chrome plating tank



Photograph 2: Containment tray below platform grating



Photograph 3: Entrance to crawlspace area



Photograph 4: Crawlspace area (Bay 2)



TRANSPORTATION MANIFEST

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator ID Number OH092362543	2. Page 1 of 2	3. Emergency Response Phone 302-629-0331	4. Manifest Tracking Number 010626974 JJK	
Generator's Site Address (if different than mailing address)						
5. Generator's Name and Mailing Address PROCINO PLATING 901 S. MARKET STREET BLADES, DE 19973		U.S. EPA ID Number <i>1AKD054126164</i>				
Generator's Phone: 302-629-0331		U.S. EPA ID Number <i>1AKD054126164</i>				
6. Transporter 1 Company Name <i>Freehold Cartage, Inc.</i>		U.S. EPA ID Number <i>1AKD054126164</i>				
7. Transporter 2 Company Name						
8. Designated Facility Name and Site Address CHEMTRON CORPORATION 35850 SCHNEIDER COURT AVON, OH 44011		U.S. EPA ID Number OH0065050803				
Facility's Phone: 440-937-5348						
GENERATOR	9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any)) RQ,NA3082,HAZARDOUS WASTE LIQUID,N.O.S. (CHROMIUM)9,PGIII,ERG-171 #20180610-008	10. Containers No. 3 <i>(Spill)</i>	11. Total Quantity DM 165 <i>(Spill)</i>	12. Unit WL/Vol. G	13. Waste Codes D005 D007
	X	2. RQ,NA3082,HAZARDOUS WASTE LIQUID,N.O.S. (CHROMIUM)9,PGIII,ERG-171 #20180610-008	TP 3 <i>(Spill)</i>	750 <i>(Spill)</i>	G	D005 D007
	X	3. RQ,NA3077,HAZARDOUS WASTE SOLID,N.O.S. (CHROMIUM)9,PGIII,ERG-171 #20180301-021	CF 9 <i>(Spill)</i>	32400 <i>(Spill)</i>	P	D007 F006
		<i>RQ, NA3077, HAZARDOUS WASTE Solid, N.O.S (Chromium) 9, PGIII, ERG-171 #20180301-021</i>	DM 2 <i>(Spill)</i>	1106 <i>(Spill)</i>	G	D005 D007
14. Special Handling Instructions and Additional Information NEEDS CD SENT TO US WASTE 24 HR EMERGENCY CONTACT MIKE PROCINO 302-629-0331 MJW2385						
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent. I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.						
Generator/Offeror's Printed/Typed Name <i>Michael P Procino</i>		Signature <i>Michael P Procino</i> Month Day Year <i>10 28 19</i>				
TRANSPORTER INT'L	16. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: Date leaving U.S.:			
	Transporter signature (for exports only):					
	17. Transporter Acknowledgment of Receipt of Materials Transporter 1 Printed/Typed Name Ex. 4 CBI Signature Month Day Year <i>3 28 19</i>					
DESIGNATED FACILITY	Transporter 2 Printed/Typed Name		Signature Month Day Year			
	18. Discrepancy 18a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
	Manifest Reference Number: 18b. Alternate Facility (or Generator) U.S. EPA ID Number					
Facility's Phone:						
18c. Signature of Alternate Facility (or Generator) Month Day Year						
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems) 1. 2. 3. 4.						
20. Designated Facility Owner or Operator. Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a Printed/Typed Name Signature Month Day Year						



LABORATORY ANALYSIS REPORTS



DECEMBER 14, 2018 SAMPLING EVENT

**ANALYSIS REPORT**

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Ten Bears Environmental, LLC
1080 South Chapel Street
Newark DE 19702

Report Date: January 15, 2019 05:01

Project: 18-1027.F

Account #: 10855
Group Number: 2020205
SDG: TBJ71
PO Number: 18-1027.F
State of Sample Origin: DE

Electronic Copy To Ten Bears Environmental, LLC

Attn: **Ex. 4 CBI**

Respectfully Submitted,

Ex. 4 CBI**Ex. 4 CBI**
Senior Specialist(717) 556-**Ex. 4 CBI**

To view our laboratory's current scopes of accreditation please go to <https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/>. Historical copies may be requested through your project manager.

**SAMPLE INFORMATION**

<u>Client Sample Description</u>	<u>Sample Collection Date/Time</u>	<u>ELLE#</u>
HA-1 (0-1) Grab Soil	12/14/2018 10:45	9947853
HA-1 (0-1)MS Grab Soil	12/14/2018 10:45	9947854
HA-1 (0-1)SD Grab Soil	12/14/2018 10:45	9947855
HA-1 (0-1)DUP Grab Soil	12/14/2018 10:45	9947856
HA-1A (2.5-3.0) Grab Soil	12/14/2018 14:15	9947857
HA-1 (4.5-5.0) Grab Soil	12/14/2018 11:05	9947858
HA-2 (0-2) Grab Soil	12/14/2018 11:05	9947859
HA-2 (2.5-3.0) Grab Soil	12/14/2018 11:45	9947860
HA-2 (4.5-5.0) Grab Soil	12/14/2018 11:50	9947861
HA-3 (0-1) Grab Soil	12/14/2018 11:35	9947862
HA-3 (2.5-3.0) Grab Soil	12/14/2018 12:00	9947863
HA-3 (4.5-5.0) Grab Soil	12/14/2018 12:05	9947864
HA-4 (0-1) Grab Soil	12/14/2018 11:53	9947865
HA-4 (2.5-3.0) Grab Soil	12/14/2018 12:25	9947866
HA-4 (4.5-5.0) Grab Soil	12/14/2018 12:30	9947867
HA-5 (0-1) Grab Soil	12/14/2018 12:20	9947868
HA-5 (2.5-3.0) Grab Soil	12/14/2018 12:50	9947869
HA-5 (4.5-5.0) Grab Soil	12/14/2018 13:00	9947870
HA-6 (2.5-3.0) Grab Soil	12/14/2018 13:15	9947871
HA-7 (2.5-3.0) Grab Soil	12/14/2018 13:25	9947872
HA-7 (4.5-5.0) Grab Soil	12/14/2018 13:30	9947873
HA-7 (6.5-7.0) Grab Soil	12/14/2018 13:31	9947874
HA-8 (3.0-3.5) Grab Soil	12/14/2018 13:40	9947875
HA-8 (5.0-5.5) Grab Soil	12/14/2018 13:45	9947876
HA-8 (6.2-6.7) Grab Soil	12/14/2018 13:50	9947877
HA-9 (0-1) Grab Soil	12/14/2018 14:30	9947878
HA-9 (2.5-3.0) Grab Soil	12/14/2018 14:35	9947879
HA-9 (4.5-5.0) Grab Soil	12/14/2018 14:40	9947880
Field Blank Water	12/14/2018 16:00	9947881

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Project Name: 18-1027.F
ELLE Group #: 2020205

General Comments:

All analyses have been performed in accordance with the DNREC HSCA SOPCAP unless otherwise noted.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:**SW-846 6020, Metals**

Batch #: 183610570801A (Sample number(s): 9947853-9947875 UNSPK: 9947853 BKG: 9947853)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:
Chromium

Batch #: 183610570802A (Sample number(s): 9947877-9947878, 9947880 UNSPK: 9947878 BKG: 9947878)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:
Chromium

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Chromium

Batch #: 190090570801A (Sample number(s): 9947876, 9947879 UNSPK: 9947876 BKG: 9947876)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:
Chromium

SM 2540 G-2011 %Moisture Calc, Wet Chemistry

Batch #: 18365820001A (Sample number(s): 9947868 BKG: 9947868)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Moisture

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-1 (0-1) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947853
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 10:45
SDG#: TBJ71-01BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 727	mg/kg 1.62	10
Wet Chemistry 00111	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 3.6	% 0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	01/09/2019 09:11		10
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-1 (0-1)MS Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947854
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 10:45
SDG#: TBJ71-01MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 671	mg/kg 0.340	2
Wet Chemistry 00118	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 3.6	% 0.50	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 15:46		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00118	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-1 (0-1)SD Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947855
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 10:45
SDG#: TBJ71-01MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 714	mg/kg 0.340	2
Wet Chemistry 00118	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 3.6	% 0.50	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 15:47		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00118	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-1 (0-1)DUP Grab Soil
18-1027.F

Ten Bears Environmental, LLC
ELLE Sample #: SW 9947856
ELLE Group #: 2020205
Matrix: Soil

Project Name: 18-1027.F

Submittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 10:45
SDG#: TBJ71-01DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 678	mg/kg 0.333	2
Wet Chemistry 00118	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 3.6	0.50	1
00121	Moisture Duplicate	n.a.	3.6	0.50	1

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 15:44		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00118	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17		1
00121	Moisture Duplicate	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-1A (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947857
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 14:15
SDG#: TBJ71-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	894	1.62	10
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	4.7	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	01/09/2019 09:18		10
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-1 (4.5-5.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947858
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 11:05
SDG#: TBJ71-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 452	mg/kg 0.328	2
Wet Chemistry 00111	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 4.8	% 0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 15:52		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-2 (0-2) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947859
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 11:05
SDG#: TBJ71-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	692	1.49	10
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.4	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	01/09/2019 09:20		10
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-2 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947860
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 11:45
SDG#: TBJ71-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	21.2	0.288	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	6.6	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 15:58		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-2 (4.5-5.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947861
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 11:50
SDG#: TBJ71-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	26.6	0.325	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	5.8	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 16:00		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-3 (0-1) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947862
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 11:35
SDG#: TBJ71-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131 Chromium		7440-47-3	246	0.288	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111 Moisture	n.a.		4.0	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131 Chromium	SW-846 6020	1	183610570801A		12/31/2018 16:02		2
05708 ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801		12/28/2018 09:40		1
00111 Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A		12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-3 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947863
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 12:00
SDG#: TBJ71-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 124	mg/kg 0.338	2
Wet Chemistry 00111	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 4.9	% 0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 16:03		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-3 (4.5-5.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947864
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 12:05
SDG#: TBJ71-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 33.8	mg/kg 0.313	2
Wet Chemistry 00111	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 7.2	% 0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 16:05		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-4 (0-1) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947865
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 11:53
SDG#: TBJ71-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	5.48	0.288	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	1.8	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 16:06		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-4 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947866
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 12:25
SDG#: TBJ71-11

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	12.2	0.306	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	5.1	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 16:08		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-4 (4.5-5.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947867
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 12:30
SDG#: TBJ71-12

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	13.7	0.259	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.6	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 16:10		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-5 (0-1) Grab Soil
18-1027.F

Ten Bears Environmental, LLC
ELLE Sample #: SW 9947868
ELLE Group #: 2020205
Matrix: Soil

Project Name: 18-1027.F

Submittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 12:20
SDG#: TBJ71-13

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium	SW-846 6020 7440-47-3	mg/kg 19.2	mg/kg 0.298	2
Wet Chemistry 00111	Moisture	SM 2540 G-2011 %Moisture Calc	% n.a. 2.5	% 0.50	1
		Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.			

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 16:11		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	2	18365820001A	12/31/2018 23:42	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-5 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947869
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 12:50
SDG#: TBJ71-14

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	10.3	0.306	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.3	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	12/31/2018 16:16		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-5 (4.5-5.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947870
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 13:00
SDG#: TBJ71-15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	4.78	0.270	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.3	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	01/09/2019 09:22		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-6 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947871
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 13:15
SDG#: TBJ71-16

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	1,080	1.54	10
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	4.2	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	01/09/2019 09:24		10
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-7 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947872
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 13:25
SDG#: TBJ71-17

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	1,110	1.50	10
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	5.9	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	01/09/2019 09:26		10
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-7 (4.5-5.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947873
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 13:30
SDG#: TBJ71-18

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	690	1.45	10
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	7.6	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	01/09/2019 09:28		10
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-7 (6.5-7.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947874
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 13:31
SDG#: TBJ71-19

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131 Chromium		7440-47-3	64.2	0.346	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111 Moisture	n.a.		16.1	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131 Chromium	SW-846 6020	1	183610570801A		12/31/2018 16:24		2
05708 ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801		12/28/2018 09:40		1
00111 Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A		12/26/2018 19:17	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-8 (3.0-3.5) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947875
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 13:40
SDG#: TBJ71-20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	2,210	2.72	20
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	2.7	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570801A	01/09/2019 09:35		20
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570801	12/28/2018 09:40		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820014A	12/26/2018 19:17	Ex. 4 CBI	1

Sample Description: HA-8 (5.0-5.5) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947876
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 13:45
SDG#: TBJ71-21

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	880	0.341	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	16.2	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190090570801A	01/14/2019 15:05		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183620570801	12/31/2018 15:55		1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	2	190090570801	01/10/2019 06:03		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820015A	12/26/2018 17:33		1

Ex. 4 CBI

Sample Description: HA-8 (6.2-6.7) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947877
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 13:50
SDG#: TBJ71-22

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	354	0.349	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	22.2	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570802A	12/31/2018 15:22		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570802	12/28/2018 08:25		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820015A	12/26/2018 17:33	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-9 (0-1) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947878
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 14:30
SDG#: TBJ71-23

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131 Chromium		7440-47-3	359	0.339	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111 Moisture	n.a.		2.4	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131 Chromium	SW-846 6020	1	183610570802A		12/31/2018 15:12		2
05708 ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570802		12/28/2018 08:25		1
00111 Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820015A		12/26/2018 17:33	Ex. 4 CBI	1

Sample Description: HA-9 (2.5-3.0) Grab Soil
18-1027.F

Ten Bears Environmental, LLC
ELLE Sample #: SW 9947879
ELLE Group #: 2020205
Matrix: Soil

Project Name: 18-1027.F

Submittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 14:35
SDG#: TBJ71-24

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 344	mg/kg 0.276	2
Wet Chemistry 00111	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 3.2	% 0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190090570801A	01/14/2019 15:16		2
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183620570801	12/31/2018 15:55		1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	2	190090570801	01/10/2019 06:03		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820015A	12/26/2018 17:33	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-9 (4.5-5.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9947880
ELLE Group #: 2020205
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 12/18/2018 17:35
Collection Date/Time: 12/14/2018 14:40
SDG#: TBJ71-25

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	1,040	1.73	10
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.4	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	183610570802A	01/09/2019 09:39		10
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	183610570802	12/28/2018 08:25		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	18355820015A	12/26/2018 17:33	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: Field Blank Water
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: WW 9947881
ELLE Group #: 2020205
Matrix: Water**Project Name:** 18-1027.FSubmittal Date/Time: 12/18/2018 17:35
Collection Date/Time: 12/14/2018 16:00
SDG#: TBJ71-26FB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals 06031	SW-846 6020 Chromium	7440-47-3	ug/l 10.7	ug/l 0.70	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06031	Chromium	SW-846 6020	1	190021404702A	01/07/2019 13:17		1
14047	ICPMS - Water, 3020A - U345	SW-846 3020A	1	190021404702	01/03/2019 05:30	Ex. 4 CBI	1

Quality Control SummaryClient Name: Ten Bears Environmental, LLC
Reported: 01/15/2019 05:01

Group Number: 2020205

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	mg/kg	mg/kg
Batch number: 183610570801A Chromium	N.D.	0.334
Batch number: 183610570802A Chromium	0.368 J	0.334
Batch number: 190090570801A Chromium	N.D.	0.334
	ug/l	ug/l
Batch number: 190021404702A Chromium	0.72 J	0.70

LCS/LCSD

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 183610570801A Chromium	5.00	5.26			105		86-120		
Batch number: 183610570802A Chromium	5.00	4.87			97		86-120		
Batch number: 190090570801A Chromium	5.00	5.61			112		86-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 190021404702A Chromium	50	50.41	50	50.94	101	102	90-115	1	20
	%	%	%	%					
Batch number: 18355820014A Moisture	89.5	89.46			100		99-101		
Moisture	89.5	89.46			100		99-101		
Moisture Duplicate	89.5	89.46			100		99-101		
Batch number: 18355820015A Moisture	89.5	89.5			100		99-101		
	Sample number(s): 9947853-9947875								
	Sample number(s): 9947877-9947878,9947880								
	Sample number(s): 9947876,9947879								
	Sample number(s): 9947853-9947867,9947869-9947875								
	Sample number(s): 9947876-9947880								

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
 (2) The unspiked result was more than four times the spike added.

Quality Control SummaryClient Name: Ten Bears Environmental, LLC
Reported: 01/15/2019 05:01

Group Number: 2020205

LCS/LCSD (continued)

Analysis Name	LCS Spike Added %	LCS Conc %	LCSD Spike Added %	LCSD Conc %	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 18365820001A Moisture		Sample number(s): 9947868 89.5		89.44		100		99-101	

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 183610570801A Chromium	700.86	9.80	647.09	9.80	687.96	-548 (2)	-132 (2)	75-125	6	20
Batch number: 183610570802A Chromium	350.5	9.43	275.89	9.43	261.89	-791 (2)	-939 (2)	75-125	5	20
Batch number: 190090570801A Chromium	737.59	7.69	661.41	6.99	731.38	-989 (2)	-88 (2)	75-125	10	20

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 183610570801A Chromium	700.86	653.21	7	20
Batch number: 183610570802A Chromium	350.5	258.1	30*	20
Batch number: 190090570801A Chromium	737.59	617.66	18	20
Batch number: 18355820014A Moisture	3.56	3.58	1	5
Moisture	3.56	3.58	1	5
Moisture Duplicate	3.56	3.58	1	5

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Ten Bears Environmental, LLC
Reported: 01/15/2019 05:01

Group Number: 2020205

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc %	DUP Conc %	DUP RPD	DUP RPD Max
Batch number: 18355820015A Moisture	Sample number(s): 9947876-9947880 BKG: 9947878 2.43	2.33	4 (1)	5
Batch number: 18365820001A Moisture	Sample number(s): 9947868 BKG: 9947868 2.50	2.29	9* (1)	5

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 10855

For Eurofins Lancaster Laboratories Environmental use only

Group # 2020205 Sample # 99

Group # 2020205 Sample # 9947853 - 205 CUC # 575942

COC # 575942

Client Information				Matrix		Analysis Requested				For Lab Use Only			
Client: <i>TEN BEAR Env.</i>	Acct. #: <i>10857</i>			<input type="checkbox"/> Tissue	<input type="checkbox"/> Sediment								
Project Name/ #: <i>18-1027.F</i>	PWSID #:			<input type="checkbox"/> Grab	<input type="checkbox"/> Potable	<input type="checkbox"/> Ground	<input type="checkbox"/> Surface					FSC: _____	
Project Manager: <i>Ex. 4 CBI</i>	P.O. #:			<input checked="" type="checkbox"/> Sediment	<input type="checkbox"/> NPDES					SCR#: <i>236412</i>	<input type="checkbox"/> Surface		
Sampler: <i>Ex. 4 CBI</i>	Quote #:			<input checked="" type="checkbox"/> Soil	<input type="checkbox"/> Other:					Preservation Codes			
State where samples were collected: <i>DF</i>		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		<input checked="" type="checkbox"/> Composite	Total # of Containers					H=HCl N=NHO ₃ S=H ₂ SO ₄ F=Field Filtered	T=Thiosulfate B=NaOH P=H ₃ PO ₄ O=Other		
Sample Identification		Collected		<input checked="" type="checkbox"/> Soil	Other:	Total # of Containers					Remarks		
		Date	Time				Grab	Water	NPDES	Other			
HA-1 (0-1)	12-14-18	1045	X	X		6	X					<i>← QA/QC</i>	
HA-1A (2.5-3.0)	12-14-18	1445	X	X		1							
HA-1 (4.5-5.0)	12-14-18	1105	X	X		2							
HA-2 (0-2)	12-14-18	1105	X	X		2							
HA-2 (2.5-3.0)	12-14-18	1145	X	X		1							
HA-2 (4.5-5.0)	12-14-18	1150	X	X		1							
HA-3 (0-1)	12-14-18	1135	X	X		1							
HA-3 (2.5-3.0)	12-14-18	1200	X	X		2							
HA-3 (4.5-5.0)	12-14-18	1205	X	X		1							
HA-4 (0-1)	12-14-18	1153	X	X		2						<i>analyze per RL manly 1090 12/30/18</i>	
Turnaround Time (TAT) Requested (please circle)				Relinquished by				Received by					
<input checked="" type="radio"/> Standard	Rush	Ex. 4 CBI				Ex. 4 CBI				Ex. 4 CBI			
(Rush TAT is subject to laboratory approval and surcharge.)				Ex. 4 CBI				Ex. 4 CBI				Ex. 4 CBI	
Requested TAT in business days: _____				Ex. 4 CBI				Ex. 4 CBI				Ex. 4 CBI	
E-mail address: <i>Ex. 4 CBI @ TENBEAR. UR</i>				Ex. 4 CBI				Ex. 4 CBI				Ex. 4 CBI	
Data Package Options (circle if required)				Relinquished by				EDD Required? <input checked="" type="radio"/> Yes <input type="radio"/> No				Relinquished by Commercial Carrier:	
Type I (EPA Level 3 Equivalent/non-CLP)	Type VI (Raw Data Only)									UPS	FedEx	Other	
Type III (Reduced non-CLP)	NJ DKQP	TX TRRP-13											
NYSDEC Category A or B	MA MCP	CT RCP									Temperature upon receipt <i>2-5-34</i>		

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

For Eurofins Lancaster Laboratories Environmental use only
Acct. # 10855 Group # 2020205 Sample # 9947853 - 205 w/ 21114

81

COC # 575940

Client Information			Matrix			Analysis Requested			For Lab Use Only	
						Preservation and Filtration Codes				
Client: <u>TEN BEAER Env</u>	Acct. #: <u>10855</u>		<input type="checkbox"/> Tissue	<input type="checkbox"/> Ground	<input type="checkbox"/> Surface				FSC: _____	
Project Name/ #: <u>18-1027.F</u>	PWSID #:		<input type="checkbox"/> Sediment	<input checked="" type="checkbox"/> Soil	<input type="checkbox"/> Composite	<input type="checkbox"/> Potable	<input type="checkbox"/> NPDES	<input type="checkbox"/> Other:	SCR#: _____	
Project Manager: <u>Ex. 4 CBI</u>	P.O. #:		<input type="checkbox"/> Water			<input type="checkbox"/> Total C or B620			Preservation Codes	
Sampler: <u>Ex. 4 CBI</u>	Quote #:		<input type="checkbox"/> NPDES						H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ P=H ₃ PO ₄ F=Field Filtered O=Other	
State where samples were collected: <u>DE</u>		For Compliance: <u>Yes</u> <input type="checkbox"/> <u>No</u> <input checked="" type="checkbox"/>							Remarks <u>PAGE 2 of 3</u>	
Sample Identification			Collected			Total # of Containers				
			Date	Time		<input checked="" type="checkbox"/> Grab	<input type="checkbox"/> Soil	<input checked="" type="checkbox"/> Composite		
HA-4 (2.5 - 3.0)	12-14-18	1225	X	X					1	X
HA-4 (4.5 - 5.0)	12-14-18	1230	X	X					2	
HA-5 (0-1)	12-14-18	1220	X	X					2	
HA-5 (2.5 - 3.0)	12-14-18	1250	X	X					1	
HA-5 (4.5 - 5.0)	12-14-18	1300	X	X					2	
HA-6 (2.5 - 3.0)	12-14-18	1315	X	X					2	
HA-7 (2.5 - 3.0)	12-14-18	1325	X	X					1	
HA-7 (4.5 - 5.0)	12-14-18	1330	X	X					1	
HA-7 (6.5 - 7.0)	12-14-18	1331	X	X					2	
HA-8 (3.0 - 3.5)	12-14-18	1340	X	X					1	↓ analyze per KL MAMM 029 1/30/18
Turnaround Time (TAT) Requested (please circle)			Relinquished by			Date	Time	R	Date	Time
<u>Standard</u>	<u>Ex. 4 CBI</u>								<u>Ex. 4 CBI</u>	<u>12/18/18 1340</u>
(Rush TAT is subject to laboratory approval and surcharge.)			Re			Date	Time	Received by	Date	Time
			<u>Ex. 4 CBI</u>			<u>12/18/18 1340</u>				
Requested TAT in business days: <u>1</u>			Relinquished by			Date	Time	Received by	Date	Time
E-mail address: <u>Ex. 4 CBI @TENBEAER. UR</u>										
Data Package Options (circle if required)			Relinquished by			Date	Time	Received by	Date	Time
Type I (EPA Level 3 Equivalent/non-CLP)	Type VI (Raw Data Only)									
Type III (Reduced non-CLP)	NJ DKQP	TX TRRP-13	EDD Required? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, format:			Relinquished by Commercial Carrier:			Date	Time
NYSDEC Category A or B	MA MCP	CT RCP	Site-Specific QC (MS/MSD/Dup)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (If yes, indicate QC sample and submit triplicate sample volume.)			UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Other			Temperature upon receipt <u>25-36</u>	

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • FOR HELP COMPLETING FORM CHECK OUT <https://www.eurofinsus.com/coc>

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 10895 Group # 2020205 Sample # 9947853 - 205
12/5/10

~~3~~ COC # 575941

For Lab Use Only

ESC:

SCR#:

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • FOR HELP COMPLETING FORM CHECK OUT <https://www.eurofinsus.com/coc>

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0718

Sample Administration
Receipt Documentation Log

Doc Log ID: 236610



Group Number(s):

2020205

Client: Ten Bean FNV

Delivery and Receipt Information

Delivery Method: ELLE Courier Arrival Timestamp: 12/18/2018 17:35
 Number of Packages: 2 Number of Projects: 2
 State/Province of Origin: DE

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Ariel Garcia (15332) at 01:39 on 12/19/2018

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	32170023	2.5	IR	Wet	Y	Bagged	N
2	32170023	3.4	IR	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mL	milliliter(s)
C	degrees Celsius	MPN	Most Probable Number
cfu	colony forming units	N.D.	non-detect
CP Units	cobalt-chloroplatinate units	ng	nanogram(s)
F	degrees Fahrenheit	NTU	nephelometric turbidity units
g	gram(s)	pg/L	picogram/liter
IU	International Units	RL	Reporting Limit
kg	kilogram(s)	TNTC	Too Numerous To Count
L	liter(s)	µg	microgram(s)
lb.	pound(s)	µL	microliter(s)
m3	cubic meter(s)	umhos/cm	micromhos/cm
meq	milliequivalents		
mg	milligram(s)	MCL	Maximum Contamination Limit
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.

Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.



FEBRUARY 13, 2019 SAMPLING EVENT

**ANALYSIS REPORT**

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Ten Bears Environmental, LLC
1080 South Chapel Street
Newark DE 19702

Report Date: February 26, 2019 16:22

Project: 18-1027.F

Account #: 10855
Group Number: 2029868
SDG: TBJ74
PO Number: 18-1027.F
State of Sample Origin: DE

Electronic Copy To Ten Bears Environmental, LLC

Attn: **Ex. 4 CBI**

Respectfully Submitted,

Ex. 4 CBI**Ex. 4 CBI**

Senior Specialist

(717) 556-**Ex. 4 CBI**

To view our laboratory's current scopes of accreditation please go to <https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/>. Historical copies may be requested through your project manager.

**SAMPLE INFORMATION**

<u>Client Sample Description</u>	<u>Sample Collection Date/Time</u>	<u>ELLE#</u>
HA-1X (4.0-4.5) Grab Soil	02/13/2019 13:30	9988697
HA-6X (3.5-4.0) Grab Soil	02/13/2019 11:10	9988698
HA-7X (3.0-3.5) Grab Soil	02/13/2019 11:15	9988699
HA-8X (5.5-6.0) Grab Soil	02/13/2019 11:25	9988700
HA-9X (5.0-5.5) Grab Soil	02/13/2019 14:05	9988701
HA-9X (5.0-5.5)MS Grab Soil	02/13/2019 14:05	9988702
HA-9X (5.0-5.5)SD Grab Soil	02/13/2019 14:05	9988703
HA-9X (5.0-5.5)DUP Grab Soil	02/13/2019 14:05	9988704
HA-9X (7.0-7.5) Grab Soil	02/13/2019 14:10	9988705
HA-10 (0-1) Grab Soil	02/13/2019 12:10	9988706
HA-10 (2.5-3.0) Grab Soil	02/13/2019 12:20	9988707
HA-10 (4.0-4.5) Grab Soil	02/13/2019 12:25	9988708
HA-11 (0-1) Grab Soil	02/13/2019 12:45	9988709

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Project Name: 18-1027.F
ELLE Group #: 2029868

General Comments:

All analyses have been performed in accordance with the DNREC HSCA SOPCAP unless otherwise noted.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:**SW-846 6020, Metals**

Batch #: 190551404902A (Sample number(s): 9988697-9988709 UNSPK: 9988701 BKG: 9988701)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Chromium

Sample Description: HA-1X (4.0-4.5) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988697
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 13:30
SDG#: TBJ74-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	182	0.281	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	5.0	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:28		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-6X (3.5-4.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988698
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 11:10
SDG#: TBJ74-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	815	0.312	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	4.4	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:30		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-7X (3.0-3.5) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988699
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 11:15
SDG#: TBJ74-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	334	0.341	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.9	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:34		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-8X (5.5-6.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988700
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 11:25
SDG#: TBJ74-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	311	0.396	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	20.4	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:36		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-9X (5.0-5.5) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988701
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:05
SDG#: TBJ74-05BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	86.3	0.257	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.9	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:19		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-9X (5.0-5.5)MS Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988702
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:05
SDG#: TBJ74-05MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 110	mg/kg 0.341	2
Wet Chemistry 00118	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 3.9	% 0.50	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:23		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00118	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-9X (5.0-5.5)SD Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988703
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:05
SDG#: TBJ74-05MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 104	mg/kg 0.337	2
Wet Chemistry 00118	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 3.9	% 0.50	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:25		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00118	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-9X (5.0-5.5)DUP Grab Soil
18-1027.F

Ten Bears Environmental, LLC
ELLE Sample #: SW 9988704
ELLE Group #: 2029868
Matrix: Soil

Project Name: 18-1027.F

Submittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:05
SDG#: TBJ74-05DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	72.3	0.310	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00118	Moisture	n.a.	3.9	0.50	1
00121	Moisture Duplicate	n.a.	3.9	0.50	1

The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:22		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00118	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43		1
00121	Moisture Duplicate	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43		1

Ex. 4 CBI

Sample Description: HA-9X (7.0-7.5) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988705
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:10
SDG#: TBJ74-06

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	10.2	0.336	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	19.9	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:38		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-10 (0-1) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988706
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 02/15/2019 17:25
Collection Date/Time: 02/13/2019 12:10
SDG#: TBJ74-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	4.65	0.297	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	2.9	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:39		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-10 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988707
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 12:20
SDG#: TBJ74-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	5.95	0.336	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	4.5	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:41		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-10 (4.0-4.5) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988708
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 12:25
SDG#: TBJ74-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	14.2	0.339	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.4	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:42		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-11 (0-1) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988709
ELLE Group #: 2029868
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 12:45
SDG#: TBJ74-10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131 Chromium		7440-47-3	478	0.311	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111 Moisture		n.a.	3.2	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131 Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:44			2
14049 ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20			1
00111 Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002A	02/19/2019 12:43		Ex. 4 CBI	1

Quality Control Summary

Client Name: Ten Bears Environmental, LLC
Reported: 02/26/2019 16:22

Group Number: 2029868

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	mg/kg	mg/kg
Batch number: 190551404902A	Sample number(s): 9988697-9988709	
Chromium	N.D.	0.334

LCS/LCSD

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 190551404902A	Sample number(s): 9988697-9988709								
Chromium	5.00	5.85			117		86-120		
	%	%	%	%					
Batch number: 19050820002A	Sample number(s): 9988697-9988709								
Moisture	89.5	89.43			100		99-101		
Moisture	89.5	89.43			100		99-101		
Moisture Duplicate	89.5	89.43			100		99-101		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 190551404902A	Sample number(s): 9988697-9988709 UNSPK: 9988701									
Chromium	82.97	9.80	106.07	9.71	100.18	236 (2)	177 (2)	75-125	6	20

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Ten Bears Environmental, LLC
Reported: 02/26/2019 16:22

Group Number: 2029868

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 190551404902A Chromium	Sample number(s): 9988697-9988709 BKG: 9988701 82.97	69.47	18	20
	%	%		
Batch number: 19050820002A Moisture	Sample number(s): 9988697-9988709 BKG: 9988701 3.93	3.85	2	5
Moisture	3.93	3.85	2	5
Moisture Duplicate	3.93	3.85	2	5

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 10955

For Eurofins Lancaster Laboratories Environmental use only

Group # 2024868

Sample # 9988697-709

COC # 530099

Client Information				Matrix		Analysis Requested				For Lab Use Only		
						Preservation Codes						
Client: <u>TEN BEAER Env.</u>	Acct. #: <u>10855</u>			<input type="checkbox"/> Soil	<input type="checkbox"/> Sediment	<input type="checkbox"/> Tissue	<input type="checkbox"/> Potable	<input type="checkbox"/> Ground	<input type="checkbox"/> Surface	<input type="checkbox"/> Other:		FSC:
Project Name/#: <u>18-1027.F</u>	PWSID #:			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		SCR#:	
Sample: Ex. 4 CBI	P.O. #:			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		Preservation Codes	
State where samples were collected: <u>DE</u>	Quote #:			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ O=Other	
				<input type="checkbox"/> Grab	<input type="checkbox"/> Composite						Remarks	
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>PAGE 1 OF 2</u>	
Sample Identification				Collected								
				Date	Time							
HA-1x (4.0 - 4.5)	2-13-19	1330	X	X	X							
HA-6x (3.5 - 4.0)	2-13-19	1110	X	X	X							
HA-7x (3.0 - 3.5)	2-13-19	1115	X	X	X							
HA-8x (5.5 - 6.0)	2-13-19	1125	X	X	X							
HA-9x (5.0 - 5.5)	2-13-19	1405	X	X	X							
HA-ox (7.0 - 7.5)	2-13-19	1410	X	X	X							
HA-10 (0-1)	2-13-19	1210	X	X	X							
HA-10 (2.5 - 3.0)	2-13-19	1220	X	X	X							
HA-10 (4.0 - 4.5)	2-13-19	1225	X	X	X							
HA-11 (0-1)	2-13-19	1245	X	X	X							
Turnaround Time (TAT) Requested (please circle)						Date	Time					
<u>Standard</u>						<u>2-14-19</u>						
<u>Rush</u>												
(Rush TAT is subject to laboratory approval and surcharge.)												
Date results are needed: _____												
E-mail address: <u>Ex. 4 CBI @ TenBEAER.vt</u>												
Data Package Options (circle if required)												
Type I (EPA Level 3 Equivalent/non-CLP)				Type VI (Raw Data Only)								
Type III (Reduced non-CLP)	NJ DKQP	TX TRRP-13										
NYSDEC Category A or B	MA MCP	CT RCP										
						EDD Required?	Yes	No				
						If yes, format:						
						Site-Specific QC (MS/MSD/Dup)?	Yes	No				
						(If yes, indicate QC sample and submit triplicate sample volume.)						
										Temperature upon receipt	21.2 °C	

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

7044 0216



Group Number(s): 2029868

Client: Ten Bears**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>02/15/2019 17:25</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>DE</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Carolyn Cyms (964) at 10:43 on 02/16/2019

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-02	2.2	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mL	milliliter(s)
C	degrees Celsius	MPN	Most Probable Number
cfu	colony forming units	N.D.	non-detect
CP Units	cobalt-chloroplatinate units	ng	nanogram(s)
F	degrees Fahrenheit	NTU	nephelometric turbidity units
g	gram(s)	pg/L	picogram/liter
IU	International Units	RL	Reporting Limit
kg	kilogram(s)	TNTC	Too Numerous To Count
L	liter(s)	µg	microgram(s)
lb.	pound(s)	µL	microliter(s)
m3	cubic meter(s)	umhos/cm	micromhos/cm
meq	milliequivalents	MCL	Maximum Contamination Limit
mg	milligram(s)		
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.

Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

**ANALYSIS REPORT**

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Ten Bears Environmental, LLC
1080 South Chapel Street
Newark DE 19702

Report Date: March 04, 2019 17:14

Project: 18-1027.F

Account #: 10855
Group Number: 2029869
SDG: TBJ75
PO Number: 18-1027.F
State of Sample Origin: DE

Electronic Copy To Ten Bears Environmental, LLC Attn: Kyle **Ex. 4 CBI**

Respectfully Submitted,

Ex. 4 CBI**Ex. 4 CBI**

Senior Specialist

(717) 556-**Ex. 4 CBI**

To view our laboratory's current scopes of accreditation please go to <https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/>. Historical copies may be requested through your project manager.

**SAMPLE INFORMATION**

<u>Client Sample Description</u>	<u>Sample Collection Date/Time</u>	<u>ELLE#</u>
HA-11 (2.5-3.0) Grab Soil	02/13/2019 12:50	9988710
HA-11 (4.5-5.0) Grab Soil	02/13/2019 12:55	9988711
HA-12 (0-1) Grab Soil	02/13/2019 14:30	9988712
HA-12 (2.5-3.0) Grab Soil	02/13/2019 14:35	9988713
HA-13 (0-1) Grab Soil	02/13/2019 14:50	9988714
HA-13 (2.5-3.0) Grab Soil	02/13/2019 14:55	9988715
HA-13 (2.5-3.0)MS Grab Soil	02/13/2019 14:55	9988716
HA-13 (2.5-3.0)SD Grab Soil	02/13/2019 14:55	9988717
HA-13 (2.5-3.0)DUP Grab Soil	02/13/2019 14:55	9988718
HA-13 (4.5-5.0) Grab Soil	02/13/2019 15:00	9988719
HA-9XSW1 (3.0-4.0) Grab Soil	02/13/2019 14:10	9988720
HA-9XSW2 (3.0-4.0) Grab Soil	02/13/2019 14:15	9988721
Field Blank Water	02/13/2019 15:34	9988722

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Project Name: 18-1027.F
ELLE Group #: 2029869

General Comments:

All analyses have been performed in accordance with the DNREC HSCA SOPCAP unless otherwise noted.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

No additional comments are necessary.

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-11 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988710
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 12:50
SDG#: TBJ75-01

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 693	mg/kg 0.330	2
Wet Chemistry 00111	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 4.6	% 0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:46		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-11 (4.5-5.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988711
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 12:55
SDG#: TBJ75-02

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 88.7	mg/kg 0.339	2
Wet Chemistry 00111	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 3.5	% 0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:47		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-12 (0-1) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988712
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:30
SDG#: TBJ75-03

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	528	0.317	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	2.4	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:49		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-12 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988713
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:35
SDG#: TBJ75-04

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	72.0	0.329	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.4	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:54		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43		1

Ex. 4 CBI

Sample Description: HA-13 (0-1) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988714
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.F**Submittal Date/Time:** 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:50
SDG#: TBJ75-05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	3.27	0.299	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	2.9	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404902A	02/26/2019 14:55		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404902	02/25/2019 07:20		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-13 (2.5-3.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988715
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:55
SDG#: TBJ75-06BKG

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	6.14	0.333	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	4.4	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.				

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404903A	03/01/2019 18:49		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404903	02/25/2019 07:00		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-13 (2.5-3.0)MS Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988716
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:55
SDG#: TBJ75-06MS

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 15.9	mg/kg 0.318	2
Wet Chemistry 00118	SM 2540 G-2011 %Moisture Calc Moisture	n.a.	% 4.4	% 0.50	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404903A	03/01/2019 18:57		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404903	02/25/2019 07:00		1
00118	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: HA-13 (2.5-3.0)SD Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988717
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:55
SDG#: TBJ75-06MSD

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium SW-846 6020	7440-47-3	mg/kg 14.7	mg/kg 0.294	2
Wet Chemistry 00118	Moisture SM 2540 G-2011 %Moisture Calc	n.a.	% 4.4	% 0.50	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404903A	03/01/2019 18:59		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404903	02/25/2019 07:00		1
00118	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-13 (2.5-3.0)DUP Grab Soil
18-1027.F

Ten Bears Environmental, LLC
ELLE Sample #: SW 9988718
ELLE Group #: 2029869
Matrix: Soil

Project Name: 18-1027.F

Submittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:55
SDG#: TBJ75-06DUP

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals 06131	Chromium	SW-846 6020 7440-47-3	mg/kg 6.64	mg/kg 0.327	2
Wet Chemistry 00118	Moisture	SM 2540 G-2011 %Moisture Calc	% n.a.	% 0.50	1
00121	Moisture Duplicate	n.a.	4.4	0.50	1
The duplicate moisture value is provided to assess the precision of the moisture test. For comparability purposes, the initial moisture determination is the value used to perform dry weight calculations.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404903A	03/01/2019 18:54		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404903	02/25/2019 07:00		1
00118	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43		1
00121	Moisture Duplicate	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-13 (4.5-5.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988719
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 15:00
SDG#: TBJ75-07

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	5.58	0.295	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.3	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404903A	03/01/2019 19:04		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404903	02/25/2019 07:00		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43		1

Ex. 4 CBI

Sample Description: HA-9XSW1 (3.0-4.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988720
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:10
SDG#: TBJ75-08

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	45.2	0.338	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.1	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404903A	03/01/2019 19:06		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404903	02/25/2019 07:00		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

Sample Description: HA-9XSW2 (3.0-4.0) Grab Soil
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988721
ELLE Group #: 2029869
Matrix: Soil**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 14:15
SDG#: TBJ75-09

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
Metals	SW-846 6020		mg/kg	mg/kg	
06131	Chromium	7440-47-3	21.7	0.287	2
Wet Chemistry	SM 2540 G-2011 %Moisture Calc		%	%	
00111	Moisture	n.a.	3.7	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06131	Chromium	SW-846 6020	1	190551404903A	03/01/2019 19:14		2
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	190551404903	02/25/2019 07:00		1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	19050820002B	02/19/2019 12:43	Ex. 4 CBI	1

2426 New Holland Pike, Lancaster, PA 17601 • 717-686-2300 • Fax: 717-686-6766 • www.EurofinsUS.com/LancLabsEnv

Sample Description: Field Blank Water
18-1027.F**Ten Bears Environmental, LLC**
ELLE Sample #: SW 9988722
ELLE Group #: 2029869
Matrix: Water**Project Name:** 18-1027.FSubmittal Date/Time: 02/15/2019 17:25
Collection Date/Time: 02/13/2019 15:34
SDG#: TBJ75-10FB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit	Dilution Factor
Metals 06031	Chromium	SW-846 6020 7440-47-3	mg/l 0.0016 J	mg/l 0.00070	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06031	Chromium	SW-846 6020	1	190521404703A	02/26/2019 07:17		1
14047	ICPMS - Water, 3020A - U345	SW-846 3020A	1	190521404703	02/21/2019 05:49	Ex. 4 CBI	1

Quality Control Summary

Client Name: Ten Bears Environmental, LLC
 Reported: 03/04/2019 17:14

Group Number: 2029869

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	mg/kg	mg/kg
Batch number: 190551404902A Chromium	Sample number(s): 9988710-9988714 N.D.	0.334
Batch number: 190551404903A Chromium	Sample number(s): 9988715-9988721 N.D.	0.334
	mg/l	mg/l
	Sample number(s): 9988722 0.00083 J	0.00070

LCS/LCSD

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 190551404902A Chromium	Sample number(s): 9988710-9988714 5.00	5.85			117		86-120		
Batch number: 190551404903A Chromium	Sample number(s): 9988715-9988721 5.00	5.05			101		86-120		
	mg/l	mg/l	mg/l	mg/l					
	Sample number(s): 9988722 0.0500	0.0554			111		90-115		
Batch number: 19050820002B	%	%	%	%					
	Moisture	89.5	89.43		100		99-101		
	Moisture	89.5	89.43		100		99-101		
	Moisture Duplicate	89.5	89.43		100		99-101		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
 (2) The unspiked result was more than four times the spike added.

Quality Control SummaryClient Name: Ten Bears Environmental, LLC
Reported: 03/04/2019 17:14

Group Number: 2029869

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 190551404903A Chromium	Sample number(s): 9988715-9988721 UNSPK: 9988715 5.87	9.09	15.21	8.40	14.1	103	98	75-125	8	20

Laboratory Duplicate

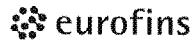
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 190551404903A Chromium	Sample number(s): 9988715-9988721 BKG: 9988715 5.87	6.35	8	20
	%	%		
Batch number: 19050820002B Moisture	Sample number(s): 9988710-9988721 BKG: 9988715 4.44	4.41	1	5
Moisture	4.44	4.41	1	5
Moisture Duplicate	4.44	4.41	1	5

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 16855

For Eurofins Lancaster Laboratories Environmental use only

Group # 2029869 Sample # 9988710-22

9988710-22

COC # 530100

Eurolabs Lancaster Laboratories Environmental LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300

The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental, 230 - 120 NEW NORDA AVE, LANCASTER, PA 17601-1200



Group Number(s): 2029869

Client: Ten Bears

Delivery and Receipt Information

Delivery Method: ELLE Courier Arrival Timestamp: 02/15/2019 17:25
 Number of Packages: 1 Number of Projects: 1
 State/Province of Origin: DE

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Carolyn Cyms (964) at 10:43 on 02/16/2019

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-02	2.2	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mL	milliliter(s)
C	degrees Celsius	MPN	Most Probable Number
cfu	colony forming units	N.D.	non-detect
CP Units	cobalt-chloroplatinate units	ng	nanogram(s)
F	degrees Fahrenheit	NTU	nephelometric turbidity units
g	gram(s)	pg/L	picogram/liter
IU	International Units	RL	Reporting Limit
kg	kilogram(s)	TNTC	Too Numerous To Count
L	liter(s)	µg	microgram(s)
lb.	pound(s)	µL	microliter(s)
m3	cubic meter(s)	umhos/cm	micromhos/cm
meq	milliequivalents		
mg	milligram(s)	MCL	Maximum Contamination Limit
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.

Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.